Nourish: Promoting Body Acceptance through Christ-Centered Identity in Female Collegiate Cross Country Runners

Kirsten E. Howland
*Messiah University*, kh1530@messiah.edu

Melinda B. Smith
*Messiah University*, mbsmith@messiah.edu

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**NOURISH: PROMOTING BODY ACCEPTANCE THROUGH CHRIST-CENTERED IDENTITY IN FEMALE COLLEGIATE CROSS COUNTRY RUNNERS**

**KIRSTEN HOWLAND**  
*Messiana University*

**MELINDA SMITH, EdD, CSCS**  
*Messiana University*

**Abstract**

Competitive runners are at increased risk for developing disordered eating, which can have serious effects on both sport and life. To reduce the incidence of disordered eating in young runners, there is a need for preventative programs focused on shifting cultural attitudes and mindset. The purpose of this study was to implement and evaluate *Nourish*, a faith-based pilot program designed to promote body acceptance and a holistic view of the self through rooting identity in Christ. With an overall adherence rate of 54%, seven members of the women’s cross country team at a private Division III Christian institution completed the 9-week pilot program. *Nourish* focused on the topics of running, nutrition and rest, with a theoretical framework of psychological needs satisfaction. Participants evaluated the program as valuable, appreciated the time spent with teammates, and highly recommended *Nourish* to other runners. Despite the moderate adherence rate, evaluations and focus group feedback indicate that *Nourish* is a valuable asset to a cross country program, and with future research and refinement could have a greater impact on Chris-centered identity and body image.

**Keywords:** disordered eating, body acceptance, identity, runners

**Introduction**

The *Nourish* program aims to empower competitive collegiate runners by fostering body acceptance and Christ-centered identity through a holistic, faith-based approach that meets the fundamental psychological needs for autonomy, competence, and relatedness, thereby reducing the risk of disordered eating. Young competitive runners may be at a greater risk of disordered eating than the general population, largely due to personality, life stage, and sport culture. Despite the increased risk, however, runners are unlikely to treat disordered eating
as a serious issue because of cultural norms. Effective treatment is scarce; seeking out treatment is scarcer (TEDx Talks, 2019; Center for Discovery). Given these issues, prevention and early intervention are imperative, particularly for runners at the high school and collegiate levels. Although risk factors for disordered eating, such as genetics, personality, and life stage, are internal and difficult to change through intervention, perhaps the greatest risk factors lie in the external structure of an individual’s environment. Therefore, prevention and treatment programs should focus on altering cultural attitudes and ideals, which can be done through reconstructing narratives and targeting social influences.

Author one was a final-year student athlete on the cross-country team during implementation of the pilot program. Much of the inspiration behind the Nourish program stemmed from her personal experience with the running culture, disordered eating, and a lack of proper treatment. Motivated by the prevalence of disordered eating she has encountered in the running community, she designed Nourish to address the need for disordered eating prevention. Author two is a former collegiate student-athlete and current faculty in the field of kinesiology. We recognized the need for innovative strategies to support body acceptance and Christ-centered identity among collegiate runners. The development of this pilot program was informed by previous research on disordered eating among athletes, a self-determined theoretical approach to providing support, and reflections from our own personal experiences.

Eating Disorders and Disordered Eating

While disordered eating and eating disorders are both characterized by problematic eating patterns, there are some fundamental differences. Disordered eating can include a range of behaviors, such as restricting food intake, skipping meals, fasting, using diuretics, laxatives and weight loss medications, and compensatory behaviors such as purging (Dennis, 2024). They do not, however, meet the frequency, duration or psychological criteria for an eating disorder diagnosis. Eating disorders (EDs) are a serious and potentially life-threatening mental illness. Diagnostic criteria for major eating disorders are outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 TR) and include consistent disturbances in eating behaviors and impaired psychological function (Dennis, 2024).

When disordered eating patterns arise, it is initially difficult to see adverse effects or to anticipate the serious possible dangers and health consequences. Disordered eating is particularly easy to hide in runners because of acceptance and normalization of certain associated behaviors. Removal of food groups, such as abruptly adopting a vegetarian pattern of eating, and increasing exercise duration or intensity, are behaviors that are dismissed as normal in runners. In
many cases, these patterns develop as a pursuit of performance or health improvement, making it even more difficult to identify the behaviors as harmful. However, despite potentially harmless motivations, disordered eating can still have major complications. Of particular note are individual health risks, low recovery rates, and implications on running culture as a whole.

EDs are associated with various adverse health outcomes, such as other psychological disorders including depression and anxiety, low body mass index (BMI), electrolyte imbalances, substance abuse, reproductive problems, organ dysfunction, heart arrhythmias, bone problems, and death (O’Brien et al., 2017). Disordered eating thoughts and behaviors put an individual at a higher risk for developing a clinically significant ED, but the symptoms experienced are often less immediately life-threatening. Common consequences of disordered eating, and those particularly relevant to runners, include depressed mood, negatively affected social relationships, conflict with other commitments such as school or work, overuse injuries, stress fractures, and overall decreased quality of life (Di Lodovico et al., 2018; Kremer et al., 2012).

The health risks outlined above are even more concerning given the low recovery rate for EDs. Runners may be unlikely to seek treatment given the culture that normalizes disordered thoughts and patterns, which in turn creates ambivalence toward treatment and decreases the likelihood of seeking recovery (Stranberg et al., 2020). Only one in ten will seek treatment for an ED. Even fewer of those who seek treatment (35%) will receive the care they need. Of those who receive the care they need, fewer still (20%) will receive that care for the appropriate length of time (Amadio, 2019). ED treatments may involve mental health counseling, nutrition education, medical care, and in-patient or residential treatment. In order to be effective, ED treatment should start early, last approximately six months, and include more than one type of intervention (Amadio, 2019; Center for Discovery; The Body Project, 2020). However, treatment that lasts for this length of time can total $250,000 or more, as in-patient treatment costs $500-2000 per day (Amadio, 2019; Center for Discovery). For the few who are treated or recover, the relapse rate is as high as 57% (The Body Project, 2020). Furthermore, EDs have the highest death rate of any psychological disorder (The Body Project, 2020; Amadio, 2019).

Running-Specific Risk Factors for Disordered Eating

One of the greatest barriers to treatment and full recovery is the running ethos. Runners exist in a culture that has the potential both to contribute to disordered eating and prevent effective treatment. Cultural ideas vary based on gender and context, but running culture often accepts and even encourages disordered eating patterns, which can mask severity. In some circles, disordered
eating behavior can be mistaken as a means of improving training and performance, which only further reinforces the behavior (Busanich et al., 2014). A culture which promotes and encourages unhealthy behavior will raise young runners to hold the same beliefs, keeping the attitude within the community alive for future generations. Research has shown that sports that emphasize leanness, such as running, have a higher incidence of disordered eating (Anderson et al., 2016; Di Lodovico et al., 2018; Hulley et al., 2007; Kremer et al., 2012; McGannon & McMahon, 2019; Scott et al., 2019; Stewart et al., 2019; Turton et al., 2017). This emphasis on leanness is created and maintained by stereotypes suggesting that runners must be thin and lean to be fast.

Additionally, running is a highly individualized sport. Compared with more cooperative sports, the individualistic focus of running can create feelings of isolation, damaging a runner’s sense of connectedness and increasing the risk for mental distress. Furthermore, objective standards of performance allow for constant comparison with self and others, which can lead runners to be self-critical. Competitive nature and ease of comparison drive runners to manipulate any variable to improve personal performance, including body and eating (Stranberg et al., 2020).

Peer and teammate dynamics may hold the greatest influence on development or prevention of disordered eating. In many high school and college settings, teammates eat meals together, and it is this mealtime company that shapes an individual’s thoughts and attitudes toward eating and body image (Scott et al., 2019). Positive influences have the potential to provide support through strong, caring friendships, promotion of healthy eating, and vigilance against disordered eating. Conversely, negative influences create pressure through forming conflicting friendships, making critical comments about appearance or eating behaviors, and promoting maladaptive norms and competitive comparisons.

Several personality traits are associated with a higher risk for developing EDs, and many of these traits are common in runners as well (Stranberg et al., 2020). Fixation on worry is associated with EDs, particularly as negative thinking pertains to body image and self-esteem (Sala et al., 2019). Perfectionism and an obsessive personality, two common characteristics of runners, are often present in conjunction with one another and are thought to increase the risk of developing disordered eating behavior (Anderson et al., 2016; Busanich et al., 2014; Hulley et al., 2007; McGannon & McMahon, 2019; Stewart et al., 2019). If perfectionism morphs into obsession as it pertains to exercise, running may become compulsive in nature. Although not officially recognized in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), exercise addiction shares many of the diagnostic criteria for other addictions.
Neuroticism, rigidity, perfectionism, and obsessive-compulsiveness in particular are personality traits commonly seen in both exercise addiction and EDs (Di Lodovico et al., 2018). In many cases, exercise addiction either leads to development of an ED or results because of one (Di Lodovico et al., 2018; Kremer et al., 2012; Turton et al., 2017). In addition to exercise addiction, EDs are contraindicated with other mental illnesses such as major depressive disorder or generalized anxiety disorder (Stranberg et al., 2020).

With a tendency toward perfectionism and fixation on training and performance, many runners struggle with placing their identity solely in their sport (Busanich et al., 2014; McGannon & McMahon, 2019; Turton et al., 2017). With a high athletic identity, athletic achievement is essential to maintaining self-esteem and stability. In turn, food deprivation and excessive running are sometimes viewed as vital to achieving these performance goals, which further distorts an athlete’s sense of identity.

Given the environment of the running culture and common personality traits, runners are at an increased risk for developing disordered eating patterns. Given the risks of disordered eating and the low recovery rate for EDs, it is imperative to address these issues before a disorder forms. Nourish seeks to address running-specific concerns and risk factors in several ways. First, it addresses issues in the running culture by increasing self-awareness and challenging the ideal of leanness. Second, it builds a space for positive social influence and creates connectedness rather than individualization. Finally, Nourish emphasizes identity that is holistic and ultimately rooted in Christ.

Self-Determination Theory

One framework that could be beneficial in developing effective prevention and treatment for disordered eating is Self-Determination Theory (SDT). SDT is a comprehensive philosophy that explores human growth and motivation by addressing individual personality, goals, behavioral choices, and social environment (Deci & Ryan, 2008). The Nourish program was built upon one component of this theory, the fulfillment of three basic psychological needs. These needs include autonomy (i.e., the feeling of independence and being in control of one’s behaviors), competence (i.e., the feeling of being effective in fulfilling a task or expectation), and relatedness (i.e., the desire to be connected with others) (Bégin et al., 2018).

When these three needs are not sufficiently met, an individual may become intrinsically or extrinsically motivated to achieve those things which will provide fulfillment in these areas (Bégin et al., 2018). Images in mass media or comments from others act extrinsically, while internalized ideals act intrinsically to motivate an athlete to pursue body image changes. For instance, a runner may
become extrinsically motivated to please coaches and peers in order to gain a sense of connectedness; motivated by performance goals in order to attain competence; or motivated by sharp discipline in manipulating one’s body, eating, or training to achieve an autonomous sense of control. Extrinsic motivators are often beneficial in chasing goals, but if an individual becomes reliant on extrinsic motivators alone, distress results at the unfulfillment of the basic psychological needs (Bégin et al., 2018, Matusitz & Martin, 2013).

Unsatisfied autonomy, competence, and relatedness lead to reliance on extrinsic motivators and mental distress when the needs continue to be unfulfilled (Bégin et al., 2018). Because of the nature of their sport, it is difficult for runners to feel satisfied in each of these areas of life. Personality traits common to runners, such as perfectionism and obsessive-compulsiveness, take away from true feelings of autonomy by creating a false sense of control. Performance pressures, particularly as level of competition and comparison to unrealistic standards increase, may strip a runner of competence because of a perceived inability to achieve goals and expectations. Finally, the individualized nature of competitive running promotes isolation rather than connectedness, resulting in a decreased sense of relatedness. In order to reduce runners’ risk of developing disordered eating, autonomy, competence, and relatedness must be proactively addressed in prevention and treatment programs. When these needs are fulfilled, an individual is released from the control of extrinsic motivators and instead experiences internal motivation. Therefore, prevention programs should focus on fostering autonomy, competence, and relatedness with the ultimate goal of fostering intrinsic rather than extrinsic motivation.

Faith-based Approaches to Body Acceptance and Identity

In a review of current research, Akrawi et al. (2015) found that strong faith was associated with lower levels of disordered eating and body dissatisfaction, whereas a weaker faith was associated with the reverse. A faith commitment may decrease the negative mental and emotional effects of exposure to thin ideals in the media (Inman et al., 2014). Relational support, both with others and God, has an impact on perception of body image and ED outcomes (Mitra et al., 2023). Therefore, a grounded faith (or lack thereof) has a potential serious impact on promoting body acceptance and rooted identity.

Nourish incorporated various psychological skills, each with a deeper rationale connected to Christian faith. Journal prompts began with a scripture passage, and posed questions encouraging participants to consider the topics of running, nutrition, and rest through the lens of faith. Goal-setting was focused on strongly rooting identity in Christ. Finally, self-talk was used to increase
competence, but was implemented in the form of breath prayers, so increased confidence would be placed in Christ instead of the self.

**Nourish Program**

There are several potential applications for fulfilling these needs within a competitive running setting, and a Christian institution provides a unique opportunity to deeply integrate faith into the program. *Nourish* incorporates journaling, goal-setting, self-talk, and team bonding activities, each of which was chosen to address a specific aspect of motivation under SDT. Journaling was centered on Biblical passages and ideas, encouraging reflection on running, nutrition, and rest within the context of faith. The journaling portion of the program also had a heavy emphasis on goal-setting, which was used to promote recognition of extrinsic motivators and to increase autonomy through identifying controllable and realistic ways to achieve goals. Self-talk was incorporated in the form of breath prayers, to increase competence through repeated reminders and encouragement of an identity rooted in Christ, rather than giving attention to negative voices from the self, peers, or society. Finally, team bonding activities were offered as a way to promote relatedness through providing social support and increasing an athlete’s feeling of connectedness with the team.

*Nourish* was initially inspired by *The Body Project*, a program focused on ED prevention through creating a space for women and girls to discuss and reject cultural ideals and societal pressures regarding the female body as presented in mass media (*The Body Project*, 2020). It is through rejecting these ideas that women and girls are empowered to accept their bodies and hopefully prevent development of an ED. *Nourish* provides a similar opportunity for discussion on these topics, but narrows the target audience to a more vulnerable population (runners) and seeks to incorporate faith as a method of secure identity placement.

The first aim of this study was to assess the efficacy of *Nourish*. Through adherence and participant feedback, the effectiveness of the program and areas for improvement were examined. A second aim was to evaluate how participation in *Nourish* impacted a Christ-centered view of identity and body acceptance in participants. Participants provided written feedback on individual sessions and the program as a whole, and verbal feedback through a post-program focus group.

**Methods**

**Participants**

Approval from the Institutional Review Board was received in late August of 2022. Participants for the pilot program were recruited from a NCAA Division
III private institution of the liberal and applied arts and sciences with approximately 3,320 undergraduate and graduate students. Recruitment occurred at the beginning of the fall 2022 competitive cross country season mainly through word of mouth and email. The only criteria for involvement in the study were age (over 18) and participation on the university’s women’s cross country team. Members of the team were recruited over two weeks, and once recruited were asked to complete the informed consent and student-athlete information sheet, which included background on age, race and ethnicity, academic major and training background. Twelve total participants attended at least one session. Of these participants, seven team members attended at least four of the nine sessions and were included in the data analysis. Participants reported running 35-55 miles per week, and represented majors in science, technology, engineering and math (STEM) (n=4) and humanities (n=3). All participants were 21 years of age and reported their race as white.

**Measures**

The program was evaluated using session and program evaluation forms and a 45-minute post-program focus group. Session evaluation forms were completed after the conclusion of seven out of nine sessions. Participants rated statements adapted from the Intrinsic Motivation Inventory (IMI) (Deci & Ryan, 2003) on a 7-point Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). The 9 survey items selected assessed interest/enjoyment (2 items), perceived choice (2 items), value/usefulness (2 items), and relatedness (3 items). These survey items were chosen to reflect the three components of basic psychological needs satisfaction within SDT. Participants also provided written feedback on aspects of the sessions that they found helpful, as well as areas to improve.

The program evaluation form was completed by each participant at the conclusion of the program. Six statements about the impact of the program, concerning identity, body image, and relationship with Christ and teammates, were rated on a 7-point Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). Participants also answered open-ended questions concerning the most helpful aspects of the program and areas that they would change.

Following completion of the program, six participants attended a 45-minute semi-structured focus group session to provide feedback. The researcher facilitated the focus group and asked open-ended questions about the personal impact of the program. Participants were asked to respond to how *Nourish* influenced their perception of running, fueling, rest, and identity. They were also asked to consider how the program influenced their relationships with teammates, as well as program aspects they would continue to apply in the future. After the session, the recording was transcribed and reviewed for thematic analysis.
Procedures

Each Nourish session included a weekly devotional topic, opportunity for reflection through journaling, and a time of team bonding and discussion led by the researcher. The devotion and journaling portions were intended to be completed individually outside of the group sessions. These session components were chosen to promote autonomy, competence, and relatedness as described by SDT.

Nourish met for nine weeks throughout the competitive cross country season. Each group session varied in content, but all began with 15 minutes of individual journaling while listening to music relevant to the week’s topic. This time was followed by 15-45 minutes of group discussion facilitated by the researcher. Some sessions featured other team-bonding activities including yoga, crafts, and baking, each activity chosen as a physical representation or practice of the week’s topic. Sessions lasted no longer than one hour.

The program was further divided into three phases, each lasting for three weeks, which were devoted to running, nutrition, and rest. The first phase focused on goal-setting through answering the question, “Who do I want to be?” The future-oriented focus of the first phase encouraged participants to consider how to glorify God in working toward and achieving their goals. The second phase had an introspective focus, challenging participants to acknowledge negative aspects of the present self through considering the question, “Who am I currently?” Acknowledgement of imperfections provided an opportunity for honesty and humility while urging participants to not be complacent in pursuing growth. The third phase focused on an identity rooted in Christ, seeking to answer the question, “Who am I in the eyes of God?” This final phase linked the first two phases through an acknowledgement of imperfections and the reality that certain goals may never be reached. This phase conveyed hope in the identity and inheritance that is already secured in Christ Jesus.

Data Generation

Several different data sources were triangulated to assess the Nourish program. Session and program evaluations were analyzed for means, and written feedback from evaluations was examined for commonalities and insights regarding shared experiences. The focus group session was audio-recorded, transcribed, and thematically analyzed. Reflexive thematic analysis provided a way to reflect on and engage with the data to generate initial meaningful themes (Braun & Clarke, 2019). This involved listening to focus group recordings and completing multiple readings of the transcript and written evaluation feedback. Author 1 made comprehensive written reflective notes after each session.
regarding adjustments, areas that participants responded well to, and adaptations for the future. The thematic analysis revealed common themes in participants’ experience in the program.

The effectiveness of *Nourish* was evaluated through the theoretical lens of psychological needs satisfaction within SDT, which informed the design of the program. The identified themes were categorized under autonomy, competence, and relatedness, as well as identity and body acceptance. Within each of these broad themes, sub-categories were identified. Major themes included the value of relationship, impact of journaling and self-reflection, and the reminder of a Christ-centered identity. The aims of the program were then assessed based on these themes.

**Findings**

A primary aim for this study was to assess the effectiveness of *Nourish* through adherence and participant feedback. A second aim was to assess the impact of the pilot program on promoting a holistic, Christ-centered identity within sport.

**Program Efficacy**

With an adherence rate of 53.9% across nine sessions, attendance was inconsistent. One participant stated, “I had a hard time being faithful in completing the journaling, but I think if I did have more time I would appreciate it a lot more. … I wish people on the team would have been able to be more committed to coming.” Despite attendance challenges, participant feedback on the program was positive, as through the program evaluation forms all participants highly recommended *Nourish* to other runners (*M* = 6.9) and hoped to continue incorporating devotions and journaling into their daily routine (*M* = 6.4). Representative focus group comments included:

I’m gonna read through the devo again, once we’re done.

I think it will be cool to take these things that we’ve talked about and start to try to apply them and then kind of look back and see how I was able to improve, maybe specific topics that I knew that I was struggling with and see where I was at like at this time.

This is one of those things where you can learn it, but you kinda need to learn it again, and again, and again, and again.
Additionally, participants expressed interest in participating in the program a second time. Two participants specifically asked if there would be a second edition of the devotion, and three participants noted a desire to go through the program with their track and field teammates:

It doesn’t matter how many times you’ve heard it, you’re still human, you’re still sinful, you’re still gonna have problems, so like, the more you talk about it, the better.

It might be cool in track too to see cause, I feel like, you know, we’re all seniors right here, but to get it from a first year’s perspective or like other years, other majors, other backgrounds, other events, from their perspective would be really cool.

I think it would be cool to get to be in a small group with them and actually get to know them through these topics.

When asked how to improve the program, there were several areas of helpful feedback. One participant suggested including more reflective questions in the journal. Another participant shared that it would be valuable to incorporate more Scripture passages relevant to the weekly topics. Perhaps the most valuable impact of the program was its role in fostering close relationships between team members. Six participants mentioned that the group sessions were valuable because of the time spent with teammates. Session evaluation responses reflected the value of the program, the perception of choice, and an interest in additional quality time with teammates (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Selected session evaluation statement</th>
<th>Session 2 M</th>
<th>Session 3 M</th>
<th>Session 4 M</th>
<th>Session 5 M</th>
<th>Session 6 M</th>
<th>Session 8 M</th>
<th>Session 9 M</th>
<th>Overall M</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe I had some choice about doing this group activity. (Perceived choice)</td>
<td>6.4</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6.8</td>
<td>7</td>
<td>6.9</td>
</tr>
<tr>
<td>I think these topics are</td>
<td>7</td>
<td>7</td>
<td>6.7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>
Program Impact on Identity

Focus group discussion revealed that Nourish had a positive impact on body acceptance and mindset regarding food (Table 2). Participants noted that the program reminded them of the importance of taking care of their bodies. Three participants commented that Nourish served as a reminder that proper fueling is necessary, regardless of racing performance, training volume or intensity, or body image. Representative comments included:

A lot of times I think I can get by on something minimal, or like maybe not always the proper type of fueling, so I think it was a good reminder and emphasis on that.

It served as a good reminder that like, through injury, like even though you’re not running, you still need to fuel your body.

It doesn’t make a food good or bad according to whether we ran or not, or how much we weigh, or any of that sort of thing.

The focus group discussion also indicated that Nourish promoted viewing identity as something rooted in Christ (Table 2). Two participants opened up about the struggle of defining their identities after graduation and the end of participating in team athletics. Three participants noted that the program helped them to understand that their identity is much greater than running or being part of a team, and ultimately found in Christ.
Table 2

Summary of Feedback on Program Impact on Identity and Body Acceptance

<table>
<thead>
<tr>
<th>Program evaluation statement</th>
<th>M rating</th>
<th>Focus group sample responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because of <em>Nourish</em>, I recognize running is important, but not all of who I am. (Holism)</td>
<td>6.3</td>
<td>“Yes I am a cross country runner and I love to run and I love to be on the team, but that is not all of who I am, I’m more than that.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I like how we talked about physical things and mental or emotional things … it was good to talk about the entirety of our bodies in that way.”</td>
</tr>
<tr>
<td>Because of <em>Nourish</em>, I respect my body more. (Body acceptance)</td>
<td>4.9</td>
<td>“Not comparing myself to my past self, but like recognizing the body that I’m in right now is serving a purpose just as my future one will.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It encouraged me to try not to look to the scale, and like not use that as a sufficient, as a way to analyze how sufficient my fuel is according to my weight.”</td>
</tr>
<tr>
<td>Because of <em>Nourish</em>, I feel like my relationship with Christ has grown. (Christ-centered identity)</td>
<td>5.0</td>
<td>“These other topics of ‘I’m a child of God’, ‘I’m loved by God’, those are things that are never gonna change.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[The program] is really focused on how we can glorify God with our bodies and treating our bodies in a way that honors Him.”</td>
</tr>
</tbody>
</table>

Note: 7-point Likert scale (1 = not at all true, 7 = very true)

Discussion

Program evaluations and focus group discussion indicated that *Nourish* was successful in supporting body acceptance and a holistic approach to identity. Participants shared that the program was valuable and provided reminders of important truths of who they are in Christ. Most importantly, the program played a role in fostering deep connections and conversations with teammates about faith.

*Nourish* impacted the three facets of basic psychological needs, as defined by SDT. Program evaluations and focus group discussion revealed the program
encouraged autonomy, as participants were inspired by the use of journaling and several expressed a desire to make it a habit moving forward. Participants demonstrated competence in expression of holistic identity and strong convictions of being rooted in Christ alone. Perhaps the greatest impact of the program was on relatedness, as every participant expressed gratitude for the opportunity to spend time with teammates and grow closer to each other through discussion of deep topics.

Beyond SDT, *Nourish* also impacted participants’ perceptions of identity and body acceptance. During focus group discussion, participants highlighted the way the program provided reminders that identity is more than a sport, career, or image. The program influenced participants to view identity as multi-faceted, but ultimately rooted in Christ. Participants also expressed ways that the program encouraged them to accept their bodies both now but also in the future, as bodies inevitably change. It was also noted that although it can be difficult to accept one’s body, it always deserves care and respect.

The feedback on the program was positive, considering the implications it has for addressing disordered eating at a fundamental level. Although this pilot program included a small sample size, and it is difficult to draw comprehensive conclusions from this, *Nourish* was shown to support autonomy, competence, and relatedness, each of which has an impact on disordered eating patterns. Furthermore, the program promoted holistic, Christ-centered identity and body acceptance, which served to stabilize mindset before disordered eating issues arise.

Despite positive feedback on the program, adherence was found to be a key challenge. It is essential to recognize the full schedules of student-athletes and consider ways to effectively incorporate a program like *Nourish*, without creating unrealistic demands on time. There are several possible reasons as to why adherence rates were low in this specific pilot study. First, the program was designed to be completely voluntary in order to promote autonomy as related to psychological needs satisfaction. Because group sessions weren’t mandatory or connected to other team activities, it was difficult for team members to incorporate this time into their schedules. Additionally, group sessions were scheduled based on majority vote, which meant that some members of the team were unable to attend, despite expressing a desire to.

Another barrier to regular attendance was revealed during focus group discussion. When asked to speak on the three areas of emphasis in the program - running, nutrition, and rest - three participants noted how they find rest to be the most difficult aspect of holistic self-care. Points of discussion included the busyness of college life, and the college student ideology that more work is always better and rest is a waste of time. Participants indicated that *Nourish* reminded them to challenge this mindset, but as the program is dedicated to rest
and reflection, it was often difficult for participants to devote time to group activities when they felt that they had more pressing obligations to attend to.

**Limitations and Future Research**

It is important to recognize positionality in the current study, as Author 1 was also a member of the women’s cross-country team and shared a personal relationship with each of the study participants. This may have inhibited participants from sharing constructive criticism of the program due to a fear of damaging the relationship. However, this could also be seen as a strength of the program, as it allowed for deeper and more honest discussions on pertinent topics. As a pilot program, *Nourish* was designed to be peer-led in order to foster this deep relatedness.

Another limitation concerns the different personalities and backgrounds of the study participants. Due to personality differences, some participants may have struggled being honest and vulnerable because of the group context of discussions. Additionally, although the institution where the pilot study was conducted is rooted in Christian faith, participants likely came from different faith backgrounds and were in different stages of their personal faith journey. During the recruiting process, demographic information was collected, but no questions were asked regarding profession of faith. Finally, while the participants identified individual differences such as major and current running mileage, the group was not racially and ethnically diverse.

In the future, group sessions could be incorporated into already-scheduled team gatherings in order to encourage attendance and participation. In addition, the program could be shortened in order to decrease the time commitment. Instead of lasting for the entirety of the cross country season, the program could run for a shorter length of time, such as six weeks, in order to provide more flexibility when the semester becomes busier. To promote openness in sharing about program feedback, it would be beneficial to have someone outside of the team facilitate a focus group discussion. It would also be valuable to study program impact on participants from different ethnic, racial, and religious backgrounds. *Nourish* has already been adapted for use by a broader range of student-athletes in diverse sports at the pilot institution. It could also be refined to specifically focus on other sports that emphasize leanness, such as gymnastics, wrestling, and swimming. Moving forward, the program could also be adapted for implementation at secular institutions.
**Conclusion**

Targeting prevention and encouraging changes in cultural attitudes toward running, body image, and food are essential in reducing the risk of future disordered eating in runners. The pilot study of *Nourish* provided an example of how to support mindset and culture shifts that could be valuable on a cross country team if used in the appropriate setting. Implementation of *Nourish* at a Christian institution provides a unique opportunity to remind athletes of their identity in Christ, but the concepts and skills utilized in the program can be translated to student-athletes outside of the context of faith. Given the small sample size of the present study, it is difficult to extend conclusions from the data beyond the current context. The findings from this study provide an initial look into how this type of program could benefit student-athletes struggling with identity or body acceptance. By promoting Christ-centered identity and body acceptance within the context of an intercollegiate team, we have the opportunity to influence attitudes around disordered eating. In addition, the *Nourish* program prepares current student-athletes to navigate future life decisions regarding exercise, nutrition, and rest beyond collegiate athletics but within the context of faith.

**References**


